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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,668	12/28/2004	Frank Muller	04-652	7419
34704	7590	02/14/2006	EXAMINER	
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			WAMSLEY, PATRICK G	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,668

Applicant(s)

MULLER, FRANK

Examiner

Patrick G. Wamsley

Art Unit

2819

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01/09/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election of Species*

Claim 12 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election of claims 1-9, as readable upon the species of Fig. 1, was made **without** traverse in the reply filed on 01/09/2006. This application is now in condition for allowance except for the presence of claim 12 to a species non-elected without traverse. Accordingly, **claim 12 should be cancelled.**

### *Specification*

The disclosure is objected to because of the following informalities:

- Page 3, ¶10: Change "preferably radially" to -- radially --.
- Page 4, ¶12: Change "so-called pseudo" to -- pseudo --.
- Page 4, ¶13: Change "a so-called Manchester" to -- Manchester --.
- Page 9, ¶35: Change "example of embodiment" to -- example --.
- Page 9, ¶35: Change "so-called simple" to -- simple --.
- Page 10, ¶40: Change "example of embodiment" to -- example --.
- Page 12, ¶47: Change "example of embodiment" to -- example --.
- Page 13, ¶49: Change "is periodic with 4mm" to -- repeats every 4 mm --.
- Page 13, ¶50: Change "as 3-bit-wide" to -- in a 3-bit-wide --.
- Page 14, ¶53: Change "periodic with 4mm" to -- every 4 mm --.
- Page 16, ¶61: Change "so-called MR angle sensor" to -- MR angle sensor --.
- Page 17, ¶63: Change "signal form" to -- waveform --.

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Page 17, ¶65: Change "so-called incremental track" to -- incremental track --.

Page 17, ¶67: Delete "in any case for example."

Page 18, ¶70: Change "form of a sine" to -- form of sine --.

Page 18, ¶70: Change "component" to -- components --.

Page 19, ¶76: Change "example of embodiment" to -- example --.

Appropriate correction is required.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Claim 1 is objected to because of the following informality:

**"preferably radially magnetized length coding"**

A claim may be rendered indefinite by reference to an object that is variable.

Here, the word "preferably" may be an inappropriate use of relative terminology. See MPEP 2173.05(b). Alternatively, it may describe exemplary claim language, as set forth in MPEP 2173.05(d). Description of examples or **preferences** is properly set forth in the specification rather than the claims. Appropriate correction is required.

### ***Allowable Subject Matter***

Claims 1-9 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the references of record neither reveal nor render obvious the recited combination including an elongate and rod-shaped carrier unit with absolute magnetic length coding having a maximum of two adjacent same-polarity coding sections.

### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,789,042 to Boyton uses pseudorandom sequences with an absolute position encoder. U.S. Patent 6,744,248 to Buchhold detects motion of a magnetic encoder. U.S. Patent 6,326,782 to Schroeder provides a MR position sensor. U.S. Patent 5,545,985 to Campbell describes a MR position sensor. U.S. Patent 5,287,630 to Geisler discloses a distance-detecting device having alternating magnetic sections [Fig. 1: 2]. U.S. Patent 5,173,693 to Fry uses a pseudo-random coding sequence with a position encoder. U.S. Patent 5,115,239 to Ushiyama provides an absolute position encoder having a magnetic material. U.S. Patent 5,068,529 to Ohno discloses an absolute position detection encoder. U.S. Patents 4,866,382 and 4,853,631 to Carmen show rotary encoders with MR sensors.

This application is in condition for allowance except for the following formal matters:

- 1) Cancel non-elected claim 12, as described above.
- 2) Amend the specification, as described above.
- 3) Clarify claim 1, as described above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. The official facsimile number is (571) 273-8300. An alternate facsimile number, (571) 273-1814, should only be used for unofficial documents.

  
**Patrick G. Wamsley**

February 6, 2006

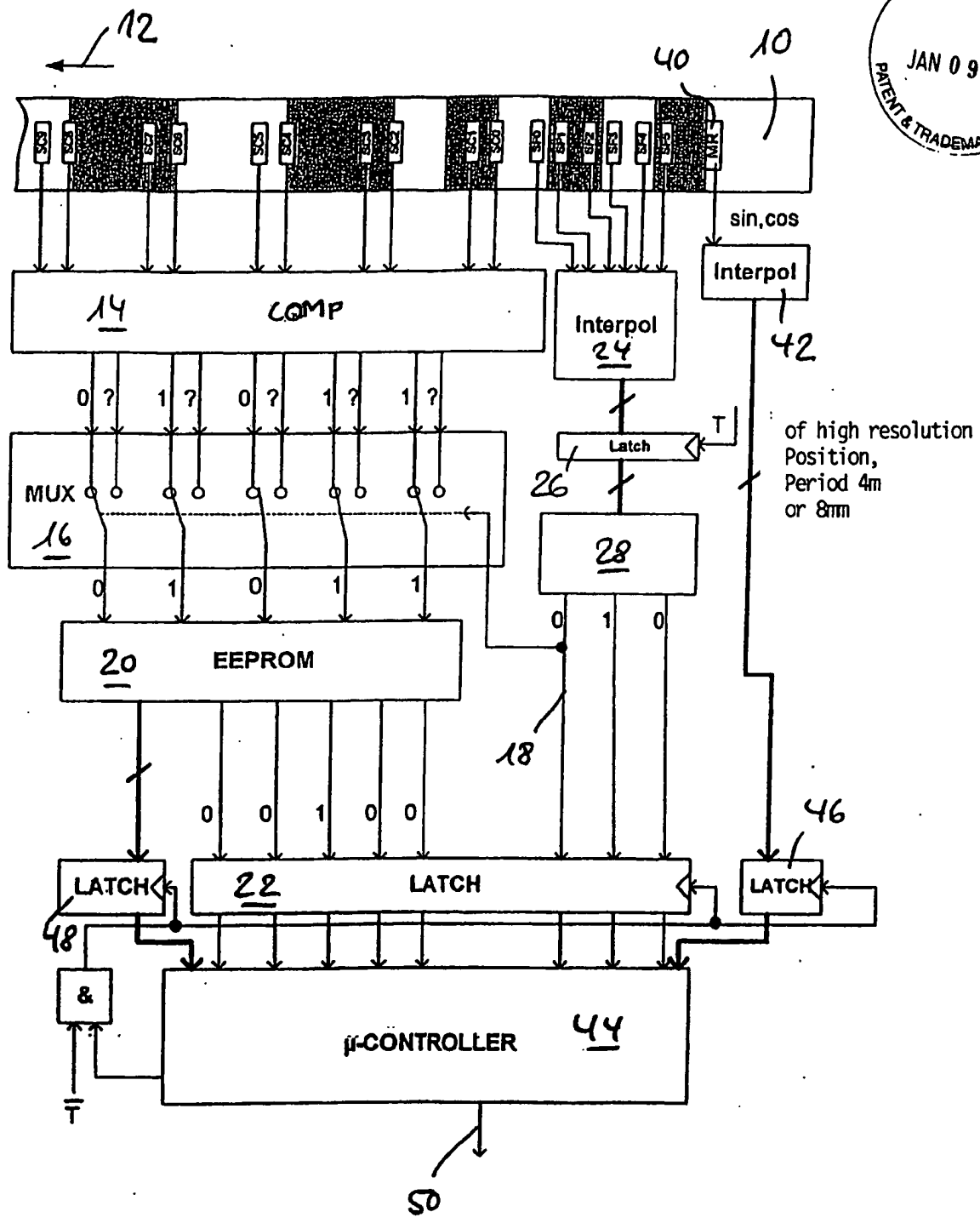


Fig. 7

OK TO CONT  
Patrick Wamsley  
PATRICK WAMSLEY  
PRIMARY EXAMINER  
01/18/2006